



STIC Search Report

EIC 2800

STIC Database Tracking Number: 170000

TO: Uyen-Chau Le
Location: JEFF 4A14
Art Unit: 2876
Wednesday, November 2, 2005
Case Serial Number: 10/669894

From: Michael Obinna
Location: STIC-EIC2800
Jefferson Building RM 4A58
Phone: 571-272-2663

Email: michael.obinna@uspto.gov

Search Notes

RE: Reprogramming system including reprogramming symbol

Examiner Le,

Attached are edited search results from the patent and non-patent databases.

The tagged items are some of the results worth your review. However, I recommend that you browse all the results.

If you would like more searching to be done on this case, or if you have questions or comments, please do not hesitate to contact me.

Respectfully,

Michael Obinna



10/669894

Enter Web Address: All Searched for <http://www.barcoview.com/Download/BarcoVector.pdf> *Attached*

2 Results

* denotes when site was updated.

Search Results for Jan 01, 1996 - Nov 02, 2005

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0 pages	0 pages	0 pages	0 pages	0 pages	0 pages	0 pages	2 pages	0 pages	0 pages
							<u>Apr 07, 2003</u> *		
							<u>Jul 28, 2003</u>		

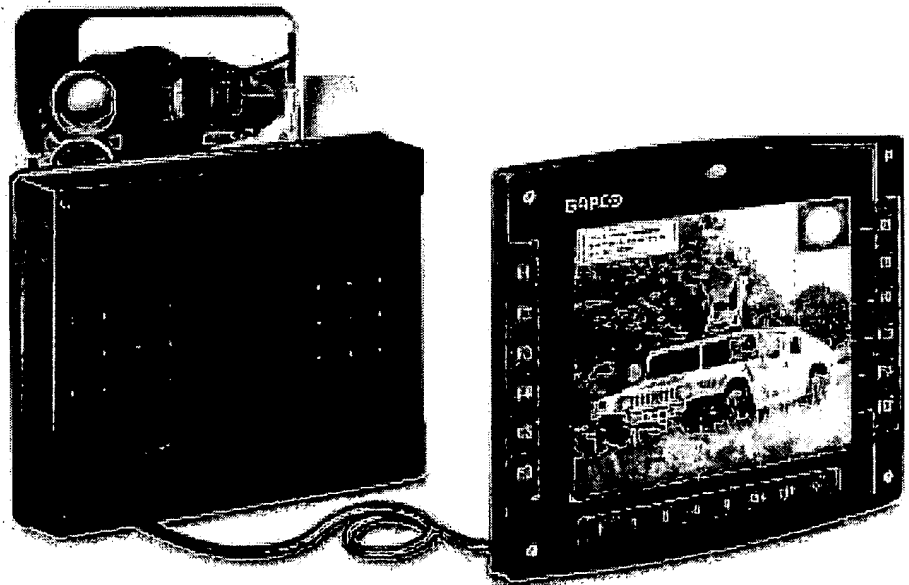
This is the date

[Home](#) | [Help](#)[Internet Archive](#) | [Terms of Use](#) | [Privacy Policy](#)



BARCO VECTOR

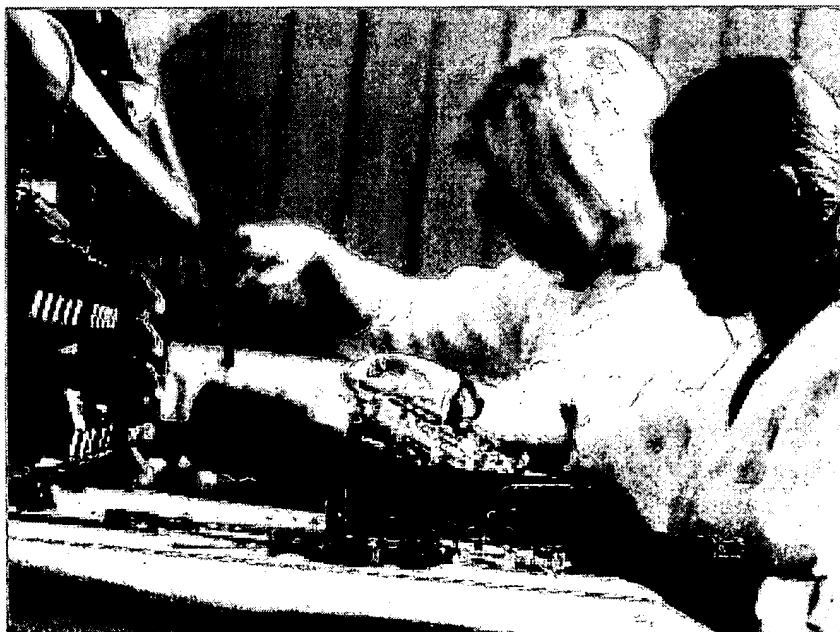
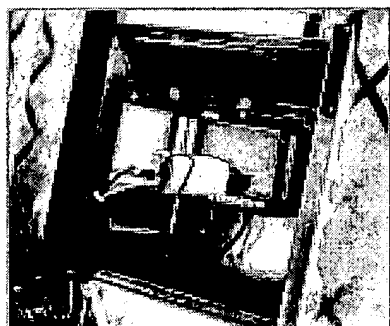
VETRONICS DISPLAY SYSTEMS



BARCO

Monitoring your Environment

Situational awareness and clear terrain information are key requirements of integrated mission management systems in ground-based applications. For observation and visualization on board armored vehicles, Barco has designed the BARCO VECTOR' product family. These modular, light-weight flat panel displays, with integrated intelligence and video capabilities, have been designed and tested to meet the MIL-standards for application in hostile environments. AQAP-110 and ISO 9001 certifications, configuration control, lifetime testing programs and worldwide customer support emphasize Barco's commitment to quality.

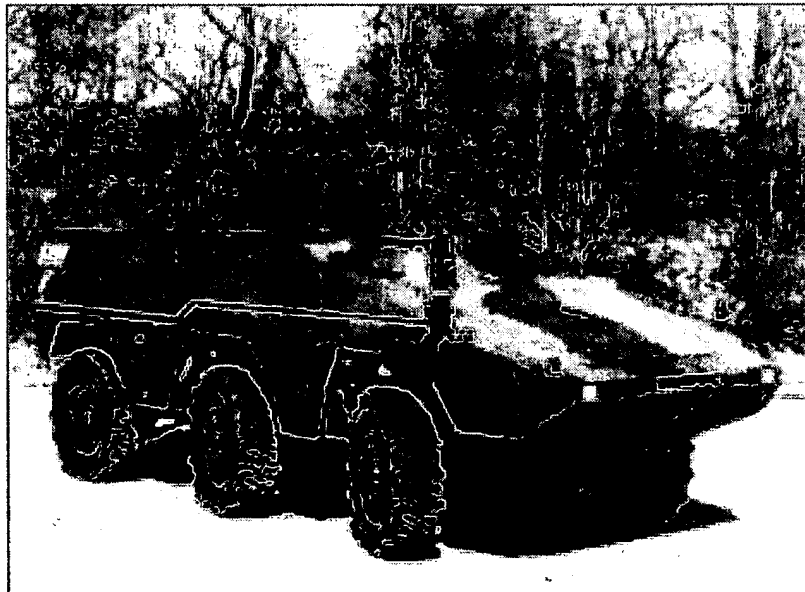
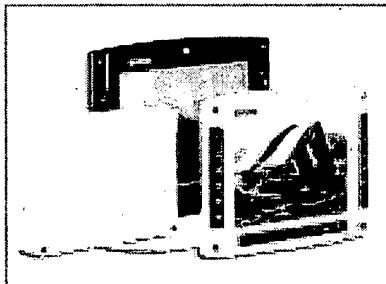
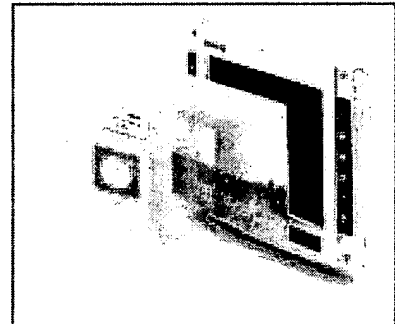


BARCO VECTOR® Display System

Ground vehicles equipped with indirect viewing systems for day and night viewing, require reliable and high-performance display solutions for operational decision making. The BARCO VECTOR® product line has been designed for observation and visualization on board armored vehicles. It comprises a range of rugged LCD panels (7", 10" and 12"), control modules and HMI software.

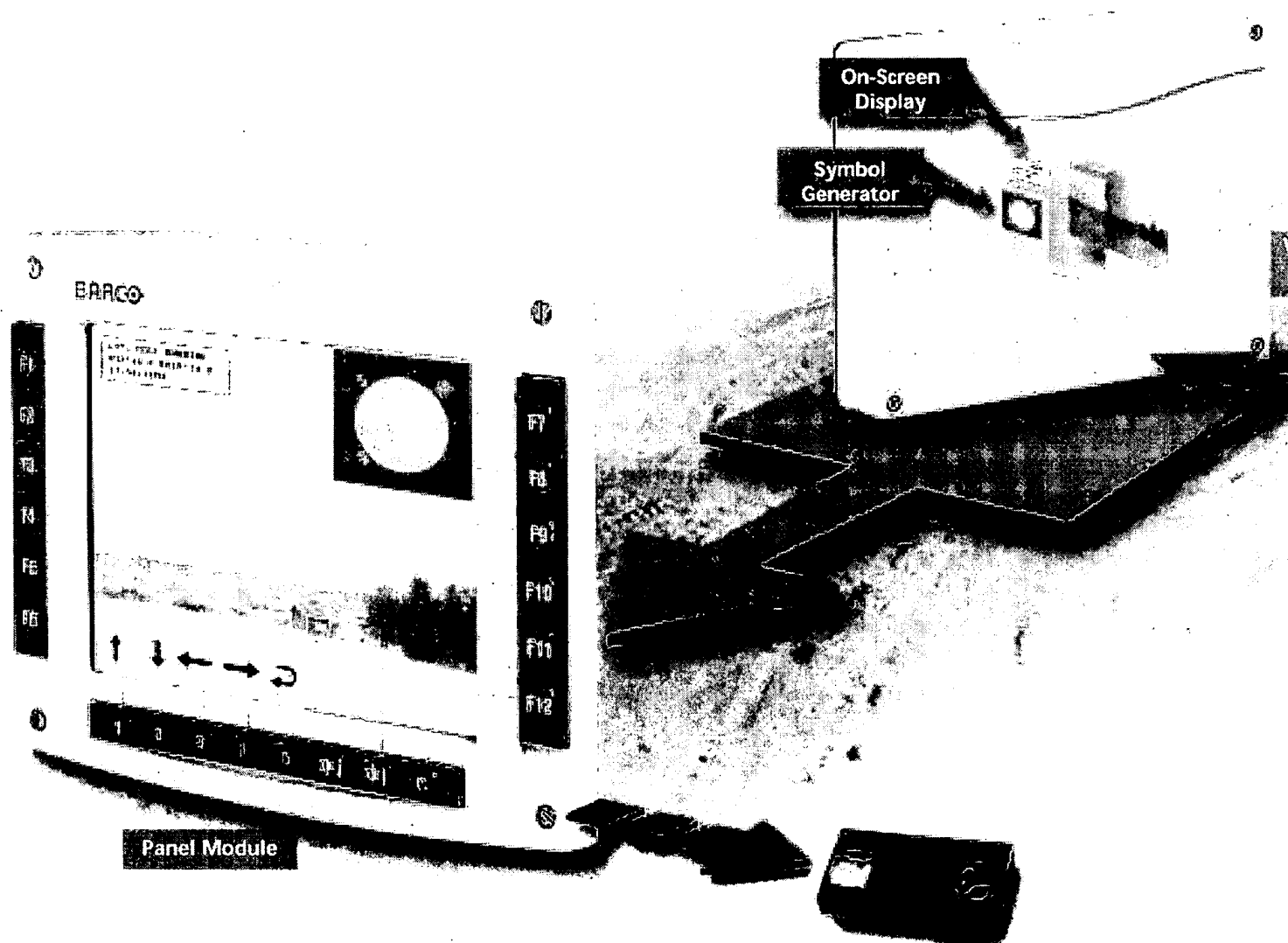
BARCO VECTOR® combines video camera images with standard text On-Screen Display, as well as graphics overlay created by a powerful Symbol Generator. The modular design allows for integration into confined spaces, whereas the Multi-Head concept allows connection of multiple displays to one Control Box. To implement your

desired functionality into the BARCO VECTOR® display system, Barco has designed the ActEv toolbox, an easy-to-use HMI software development and customization tool.



Visualization and Observation

The BARCO VECTOR' Display System features a Video Control Module and a Panel Module. Video Control and Panel Modules can be installed separately or mounted together. For observation purposes, the BARCO VECTOR' display system features multiple video and infrared display possibilities. Both day and night cameras can be connected. Mapping and tactical information can be visualized through overlay over camera images or via computer-generated RGB inputs.



on Board Vehicles

Multi-Head Control

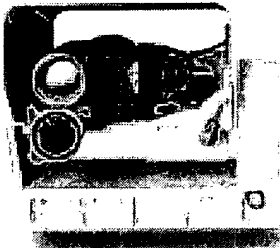
With the increasing reliance on indirect viewing systems, Barco has developed a Multi-head Control Box. This control box allows to control up to four Panel Modules through a single VectorLink and is then further customized to your specific application needs. Three panels offer complete functionality (including text and graphics overlay), whereas the fourth one functions as a slave display (analog input) for e.g. rear view driver images. Barco's Multi-Head Control facilitates overall management of video & RGB routing and communication. The Sealed Control Box, with integrated switching and processing capabilities, allows for easy installation and drastically reduces cabling in the cockpit. With the ActEv Multi-Head Toolbox, integrators can implement customized functionalities.

log input) for e.g. rear view driver images. Barco's Multi-Head Control facilitates overall management of video & RGB routing and communication. The Sealed Control Box, with integrated switching and processing capabilities, allows for easy installation and drastically reduces cabling in the cockpit. With the ActEv Multi-Head Toolbox, integrators can implement customized functionalities.

Features

- Up to 8 camera inputs (Y/C mode)
- Up to 3 RGB inputs
- Up to 4 Panel Modules
- Independent overlays per Panel Module
- Up to 20 communication channels
- Dual CAN-bus
- Redundant power supply
- Sealed Control Box

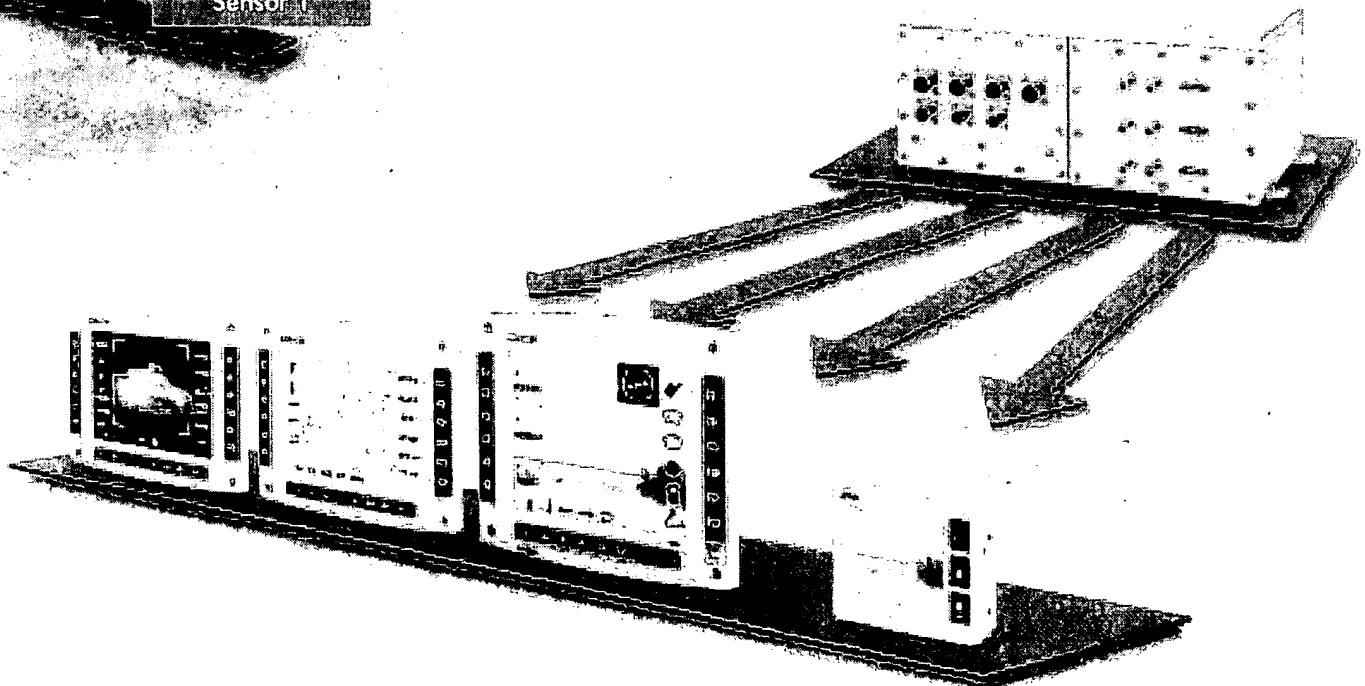
Camera 1



Video Control Module



Sensor 1



10" and 12" Display Systems

4:3 Aspect Ratio

Barco's 10" and 12" vetronics display systems combine a Video Control Module (VCM) with one or more Panel Modules (PM). These modules, in a light-weight composite housing, can be installed either separately or mounted together in case there is not enough space available in the vehicle cockpit. The modules are connected by means of a single cable, the VectorLink, and can be installed up to 5 meter from each other.

Video Control Module (VCM)

The VCM processes all inputs from cameras and other sensors. This module also provides a communication interface with an external computer or sensor, and transmits the processed commands via a serial communication bus (e.g. RS 232, CAN, ...).

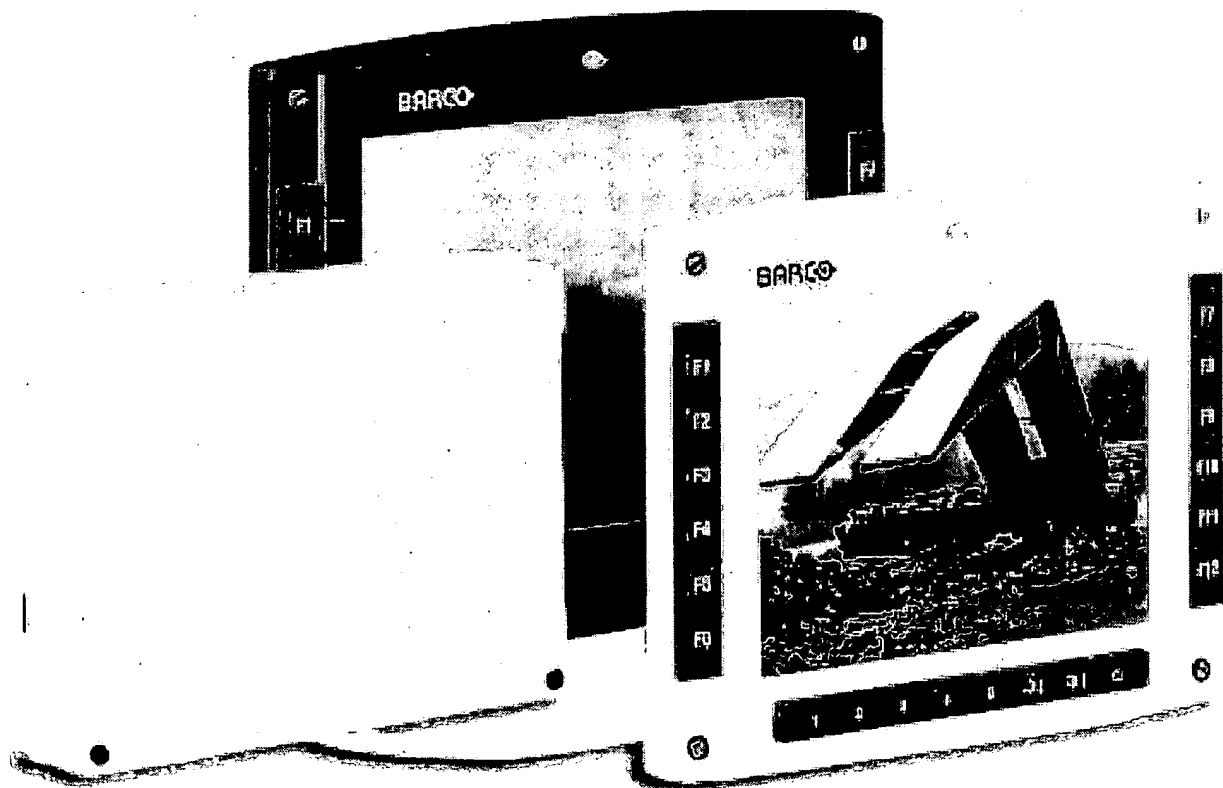
The VCM directly interfaces with the PM. It processes all user inputs from function buttons, touch screen and

serial communication, and translates them into specific control actions (e.g. display of OSD messages, Symbol Generator graphics).

Finally, the VCM provides optional video recording: the images actually shown on the screen (video, OSD and graphics overlay) can be taped on an external VCR (PAL or NTSC).

Panel Module (PM)

The PM displays camera images (video input) or RGB graphics, generated by the VCM. Available screen sizes are 10" and 12", with SVGA (800 x 600) resolution. With its user-configurable and programmable buttons, the PM also functions as operator interface (HMI). The PM can further be used as a handheld terminal.



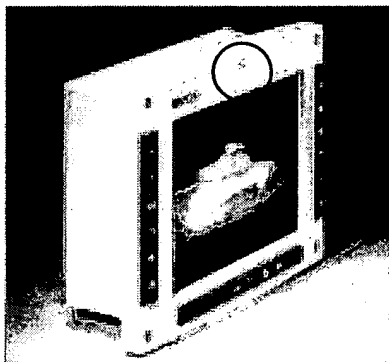
BARCO VECTOR® Features

Thermal Camera Compatible

The BARCO VECTOR® Display System has two PAL-NTSC video inputs, which can also be configured to most thermal imaging standards (Stanag B and C). Thermal images can be displayed in full greyscale mode or either colored by the use of three independent Look-Up Tables (LUT).

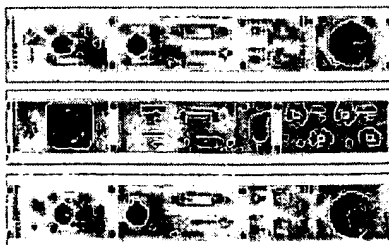
Ambient Light Control

The BARCO VECTOR® Display System features an Ambient Light Control function which automatically adapts the panel's contrast and brightness settings to changing light conditions.



Customized Electrical Interface

The BARCO VECTOR® Display System features a customized electrical interface that can be adapted to the customer's program requests.

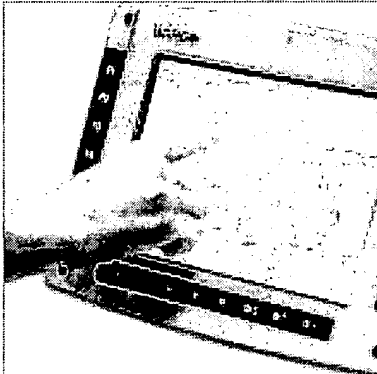


Modular Design

Panel and Video Control Module can be installed separately or mounted together.

Touch Screen

Optionally, the Panel Module can be equipped with a touch screen.



Sealed, Light-Weight Housing

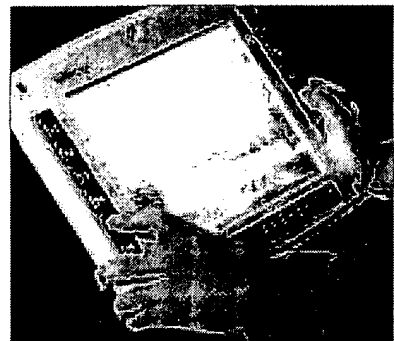
The BARCO VECTOR® Display System features a light-weight, cost-effective housing that has been ruggedized in accordance with MIL-STD-810 for application in hostile environments. The extensive use of composite materials results in reduced weight, whereas the completely sealed units protect against moisture, sand and dust contamination.

Enhanced User Comfort through Button Illumination

The function buttons of the Panel Module have optional illumination and status indication. Moreover, the Panel Module can be used as a hand-held terminal.

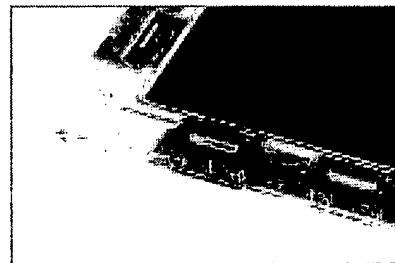
VectorLink

The Panel and Video Control Modules are connected by means of a single cable, the VectorLink. The two modules can be installed up to 5 meter from each other.



Bonded Optical Stack

Barco has developed unique bonding techniques to protect the LCD against extreme environmental conditions and to improve the optical performance significantly. Front bonding also avoids condensation between the protective glass and the LCD.



ActEv HMI toolbox

The in-house designed ActEv toolbox (see next pages) allows the operator to define and customize the Human Machine Interface (HMI).

7" Display Systems

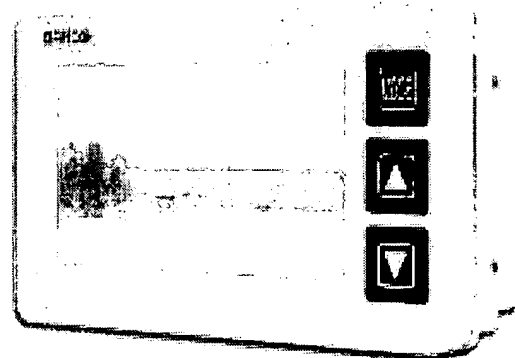
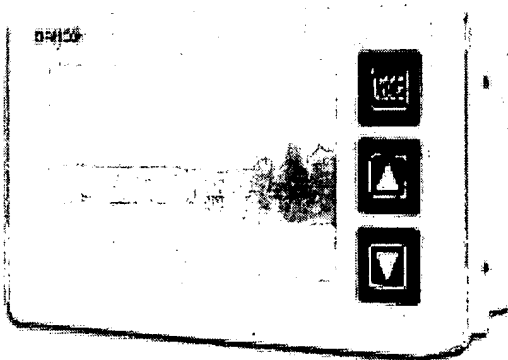
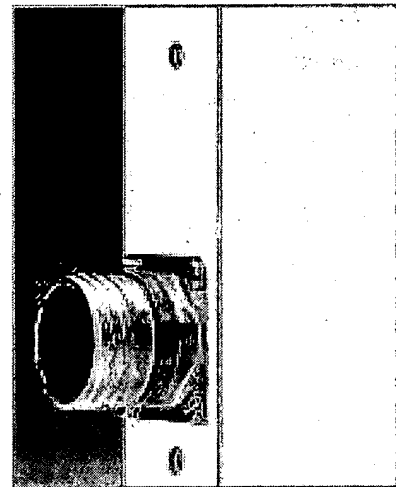
16:9 Aspect Ratio

The BARCO VECTOR' product family features two 7" display systems with 16:9 aspect ratio: the DM 118 has video processing, Symbol Generator and On-Screen Display integrated into its housing, whereas the PVM 118 incorporates video processing functionality. The LCD display modules are completely sealed and ruggedized for use in hostile environments and feature bonded front glass for optimum optical performance. Both display systems can also be used in 4:3 aspect ratio through image scaling and feature image mirroring for use in rear-view applications.

PVM 118

The PVM 118, with dual video input functionality for observation purposes, accepts a wide range of video standards, including PAL/NTSC and thermal imaging timings (STANAG B and STANAG C). The auxiliary display's 16:9 landscape format is compatible with many direct viewing systems and presents optimum panoramic views.

The PVM 118 displays images in W-VGA resolution (854 x 480 pixels). It has been designed to meet the MIL-standards for application in hostile environments. The 7" display system is equipped with two serial communication ports and features auto scan detection (of PAL/NTSC or STANAG).



Mirror function for rear view applications

ActEv HMI toolbox

The in-house designed ActEv toolbox (see next pages) allows the operator to define and customize the Human Machine Interface (HMI).

Customizable I/O

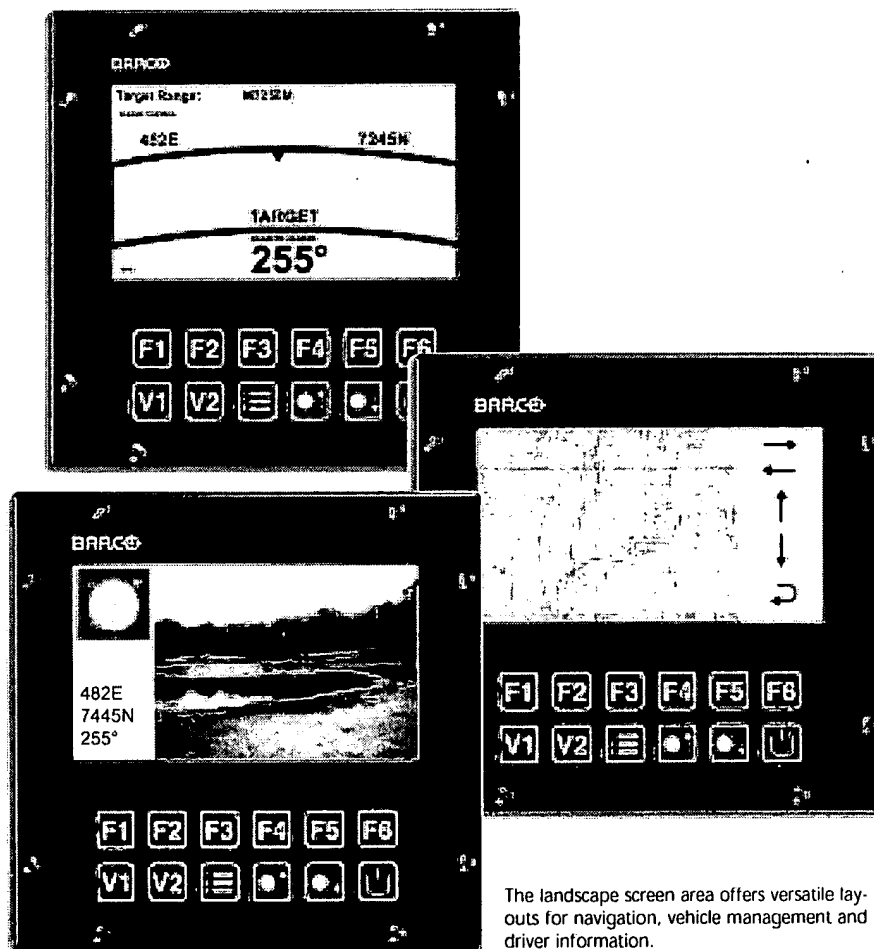
BARCO VECTOR[®] features a customizable I/O to configure the display system to the visualization requirements of your typical application.

16:9 aspect ratio

The 16:9 aspect ratio of the DM 118 and PVM 118 offers enhanced user comfort as the image format complies with the format of most direct optical viewing systems (vision blocks, periscope).

DM 118

Designed for use as information and observation display, the DM 118 displays a wide range of camera and/or thermal images. The display system simultaneously presents information from several sources. Camera images (video input) can be overlaid with text On-Screen Display and full dynamic graphics overlay from the optional Symbol Generator. The system is equipped with user-configurable and programmable function buttons (operator interface). The DM 118 also features a communication interface with an external computer or sensor and transmits the processed commands via a serial communication bus (e.g. RS 232, CAN, ...).



The landscape screen area offers versatile layouts for navigation, vehicle management and driver information.

ActEv Toolbox for HMI Software Development

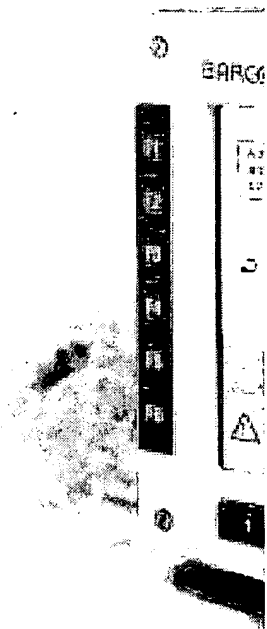
ActEv is an easy-to-use software development tool that allows to implement the end-user's desired functionality into the BARCO VECTOR' display system by assigning actions to events. It allows system integrators to generate customized software applications, fully tailored to their clients' needs, while avoiding time-consuming code programming.

During project design, the ActEv toolbox runs on a standalone PC and links actions and events. Events are incoming messages from manual inputs by the user (e.g. button pressed, touch screen), from communication lines (e.g. CAN bus, RS 232) or from the BARCO VECTOR' display system itself (e.g. status information). Actions define the response of the display system to the events. This may imply changing information on screen or sending out a message to a peripheral device.

ActEv consists of a kernel module to which several plug-ins can be added (modularity). The modular ActEv approach enables inserting new hardware into the display system (e.g. processor upgrade, new bus, other Panel Module). Projects, screen layouts and symbols can be stored in libraries and can easily be reused in new projects. For the design of the Graphical User Interface, ActEv provides a predefined library of graphics, bitmaps and fonts to speed up development. All designed screens and

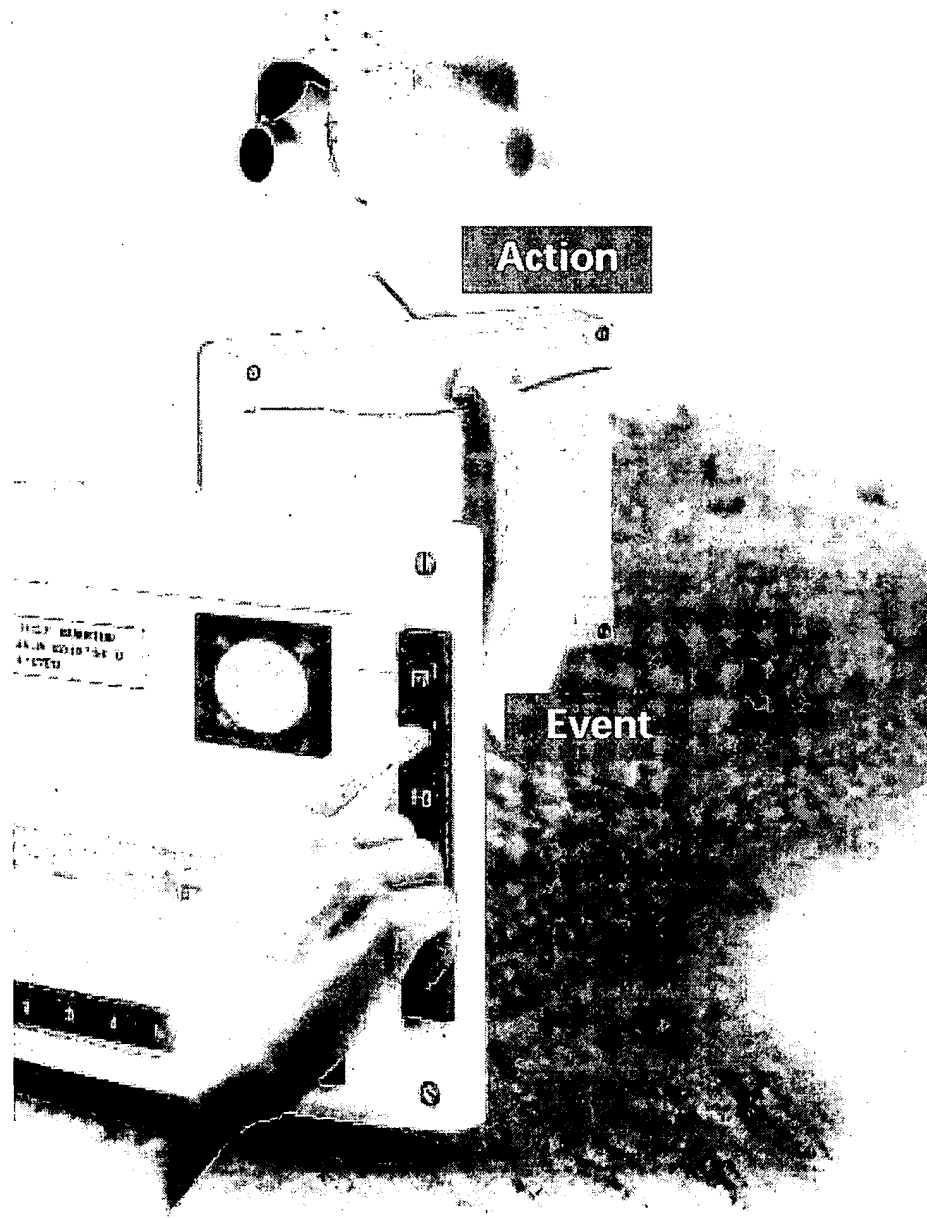
programmed actions can be simulated before the application is uploaded to the BARCO VECTOR' display system.

The userfriendliness and unlimited possibilities of the ActEv HMI toolbox will convince you that customization no longer compromises optimum performance and swift development.



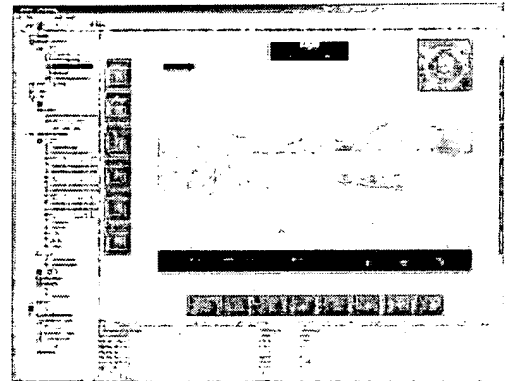
- Interactive and user-friendly
- Rapid Development
- Early end-user involvement
- Re-use screen layouts and libraries

ment

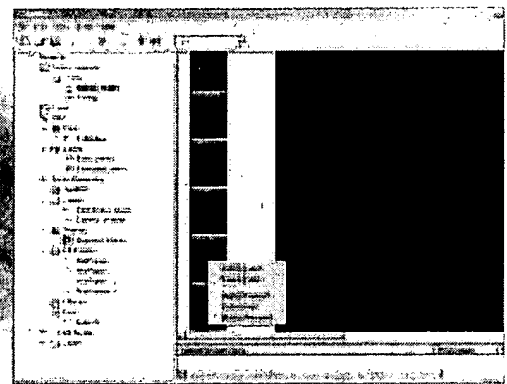


Action

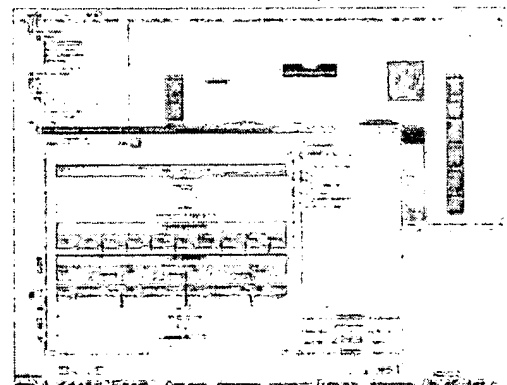
Event



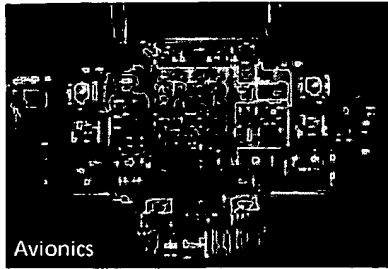
GUI design with symbols and menu structures



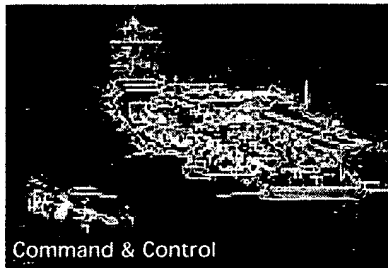
Programming function buttons



Building protocols for communication with sensors and on-board computers



Avionics



Command & Control



Vetronics



Air & Vessel Traffic Control



Medical Imaging

BarcoView

BarcoView is a recognized international technology leader providing high-performance display systems and graphics controllers for demanding niche markets such as Avionics, Command & Control, Vetronics, Air and Vessel Traffic Control and Medical Imaging.

A continued, focused investment in research and development gives the company a unique expertise in providing high-performance, state-of-the-art display systems. Its facilities, located in Kortrijk, Belgium; Toulouse, France; Atlanta, Georgia, USA and Portland, Oregon, USA; are fully equipped for in-house design, development, testing and manufacturing. AQAP-110 and ISO 9001 certifications, complete control of the production process, extensive environmental testing programs, worldwide customer support and project-specific customization, confirm Barco's commitment to technologically advanced, cost-competitive solutions.

BarcoView is one of the three strategic activities of the Barco Group, active in Image Processing. In 2001, the group delivered a turnover of 792 million EUR. Barco has a network of subsidiaries, distributors and agents in 97 countries throughout the world. The company has been quoted on the Brussels Stock Exchange since 1986, and is now quoted on Brussels/Euronext. Barco is a BEL 20 and Next 150 company and is a member of the Dow Jones Sustainability Indexes.

All non-Barco products and company names cited are trademarks of their respective owners.

June 2002 - Ref. Vet - 02-002

BarcoView

Th. Sevenslaan 106 - B-8500 Kortrijk, Belgium
Phone: +32 56 233 413 - Fax: +32 56 233 462

E-mail: sales.commandcontrol.barcoview@barco.com - Website: www.barcoview.com

BarcoView Texen

7 Rue Roger Camboulives - BP 1226 - F-31037 Toulouse, France
Phone: +33 5 61 19 41 00 - Fax: +33 5 61 19 40 88

BARCO

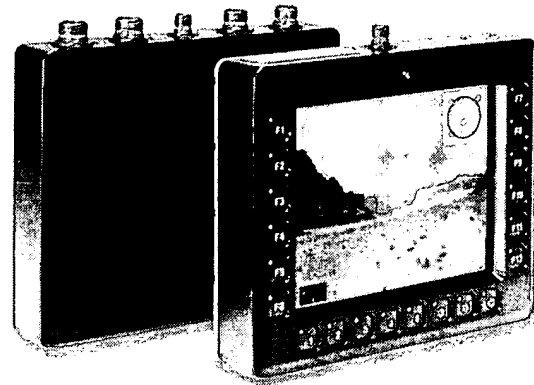
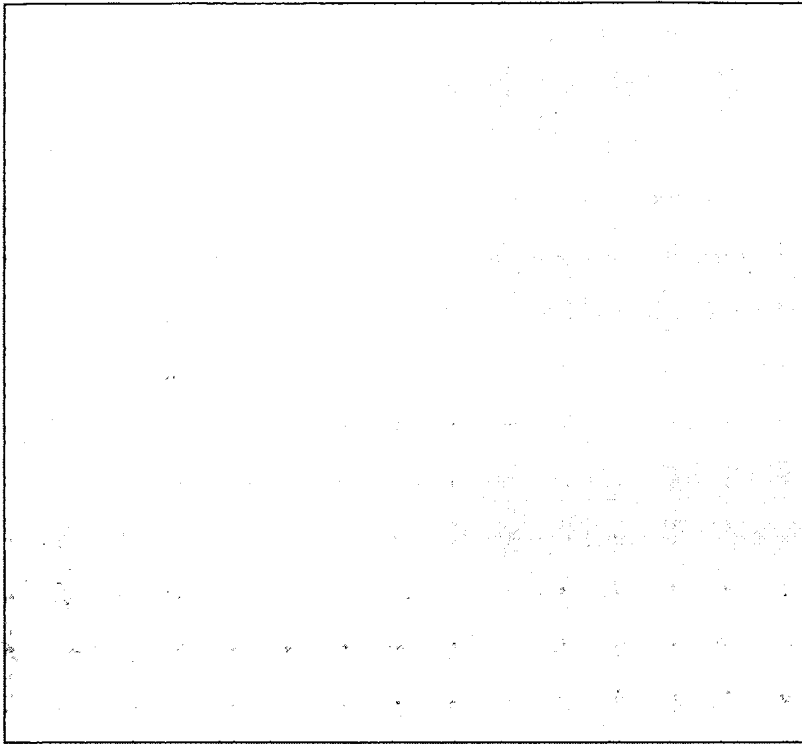
INNOVATORS IN IMAGE PROCESSING

BarcoView, LLC

3059 Premiere Parkway - Duluth, Georgia, 30097-4905, USA
Phone: +1 678 475 8000 - Fax: +1 678 475 8100

BARCO VECTOR®

DM1126 / PM1126 / VCM1101



10" Vetronics display system

Main features:

- High level of ruggedization
- Unique front bonding technology keeps the display condensation-free and provides optimum optical performance at all times
- Split design for easy integration into confined spaces and consoles
- 20 user-definable function buttons
- Uncompromised night vision capability in high resolution
- Symbol Generator for fast graphics overlay
- On-Screen Display for text overlay
- Rapid HMI development and customization with ActEv
- Serial control of peripheral devices
- CAN bus communication

The 10" BARCO VECTOR® flat panel display has been specifically designed for observation and driver enhancement on board rugged vehicles. Barco's rugged vetronics displays are available in a split configuration or as a single unit. The Barco VECTOR® combines a 10" 800 x 600 SVGA Panel Module (PM 1126) with a Video Control Module (VCM 1101), connected by means of a single cable, the VectorLink. Thanks to the split design, the VCM 1101 can be placed in a remote location, requiring less space. Barco's Display Module (DM 1126) unites the PM 1126 and the VCM 1101 into a single ruggedized unit.

BARCO VECTOR® can handle a wide range of external RGB and video sources, including digital maps and FLIR. Furthermore, the display offers extensive functionality, including 20 user-definable function buttons, a powerful symbol generator for fast graphics overlay and on-screen display functionality. BARCO VECTOR® offers the option of ActEv, an easy-to-use software development tool that allows to implement the end-user's desired functionality into the display system by assigning actions to events. It allows system integrators to generate customized software applications, fully tailored to their clients' needs.

BARCO

Visibly yours

Technical specifications

ELECTRO OPTICAL

Panel type	Color a-Si TFT Active Matrix LCD
Panel size	10.4" (260 mm)
Panel resolution	SVGA - 800 x 600 pixels
Pixel dimensions	0.264 mm (H) x 0.264 mm (V)
Image dimensions	211.2 mm x 153.4 mm (8.315" x 6.036")
Panel specifications	16M colors (with dithering) 256 grayscales (with dithering)
Brightness	
Basic:	Max. 300 cd/m ² (92.4 ft) typical
EMI Mesh	Max. 280 cd/m ² (86.2 ft) typical
Contrast ratio	300:1 @ dark environment
Dimming ratio	Typ. 400:1
White uniformity	Typ. 25% non-uniformity
Viewing angle	Horizontal @ CR = 10 ± 70° Vertical @ CR = 10 ± 40° / - 70°

INPUTS

Video	Standard 2 differential inputs Optionally up to 4 (PAL, NTSC, STANAG B, STANAG C)
RGB	1 differential input
Supported resolutions:	VGA up to SVGA
Communication	Up to 4 serial channels, switchable between: RS-232 and RS-422 1 CAN Bus 2.0B, High Speed, Active per ISO 11898
Connectors	MIL-C-38999/3

OUTPUTS

Video	1 slave output, non-differential 1 recorder output, non-differential
-------	---

MECHANICAL DATA

Mounting	4 x M6 captive bezel bolts
Orientation	All orientations
Weight	
DM 1126:	Max. 6 kg (13.2 lbs)
PM 1126:	Max. 4 kg (8.8 lbs)
VCM 1101	Max. 3.3 kg (7.3 lbs)
Cooling	Natural convection, no fans installed
Dimensions	(WxH) 300 mm (11.811") x 240 mm (9.449")
Depth	
DM 1126:	95 mm (2.74")
PM 1126:	54 mm (2.13")
VCM 1101:	53 mm (2.09")

ENVIRONMENTAL

Low operating temp.	- 46°C / - 51°F	MIL-STD-810 F
High operating temp.	+63°C / + 145°F	MIL-STD-810 E
	+71 °C / + 160 °F for 30 minutes	
Low storage temp.	-51°C / -60°F	MIL-STD-810 E
High storage temp.	+75°C / +167°F	MIL-STD-810 E
Humidity	100% @ +45°C / +113°F condensing	MIL-STD-810 E
Vibration	Sine Vibration	MIL-STD-810 E
	Random Vibration (all terrain vehicles)	
Shock	55 g-12.5 ms half sine	MIL-STD-810 D
EMI/EMC	Ground-Army	MIL-STD-461 D
Drip proof	Water-Immersion	MIL-STD-810 E
Altitude (operating)	Up to 10,000 m	MIL-STD-810 E
Altitude (storage)	Up to 10,000 m	MIL-STD-810 E
Sand & dust, salt fog	comply at unit level	MIL-STD-810
MTBF	10,000 hours	MIL-HDBK-217F
	GM 40°C	

POWER

Power supply	28 VDC	MIL-STD-1275B
Max. Power consumption		
Without Symbol Generator	145 W	
With Symbol Generator	150 W	

CONTROLS & INDICATORS

Bezel controls	20 programmable Function Buttons Push button, metal dome Programmable, dimmable backlight and key status indicators
----------------	--

ACTEV TOOLBOX

Both the DM 1126 (SG) and the PM 1126 (SG) - VCM 1101 are fully Actev compatible.

OPTIONS

Symbol Generator	For complex and dynamical graphical overlay
Dual CAN-Bus	MIL CAN protocol
Touch Screen	For more information, please contact Barco.
Front mesh	DEF STAN 59-41 compliance

BarcoView

1h, Sevenslaan 106 - B-3500 Kortrijk, Belgium
Phone: +32 56 233 412 - Fax: +32 56 233 462
E-mail: sales.defense@barco.com

BarcoView, LLC

3059 Premiere Parkway - Duluth, Georgia, 30097-4905, USA
Phone: +1 678 475 8000 - Fax: +1 678 475 8100
E-mail: sales.barcoview-ag@barco.com

BarcoView-TEXEN

7 Rue Roger Camboulives - BP 1226 - F-31037 Toulouse, France
Phone: +33 5 61 19 41 00 - Fax: +33 5 61 19 40 83

Barco Orthogon AG

Hastedter Osterdeich 222
28207 Bremen, Germany
Phone: +49 421 20 12 20 - Fax: +49 421 20 12 29 99
E-mail: info.orthogon@barco.com

Sigma

In search of continuous improvement

Ref. Defense 04-018 - June '04

Technical specifications are subject to change without prior notice

www.barcodefense.com

BARCO

Visibly yours

11/2/2005 3:24:33 PM

[File 2] INSPEC 1898-2005/Oct W4
[File 34] SciSearch(R) Cited Ref Sci 1990-2005/Oct W4
[File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec
[File 94] JICST-EPlus 1985-2005/Aug W4
[File 99] Wilson Appl. Sci & Tech Abs 1983-2005/Sep
[File 344] Chinese Patents Abs Aug 1985-2005/May
[File 347] JAPIO Nov 1976-2005/Jun(Updated 051004)
[File 350] Derwent WPIX 1963-2005/UD,UM &UP=200570
[File 371] French Patents 1961-2002/BOPI 200209
[File 23] CSA Technology Research Database 1963-2005/Oct
[File 95] TEME-Technology & Management 1989-2005/Sep W4
[File 60] ANTE: Abstracts in New Tech & Engineer 1966-2005/Oct

11/2/2005 3:24:33 PM

Set	Items	Description
S1	1127000	S (SYMBOL???? OR NUMBER???? OR CODE? ? OR ENCOD???? OR DATA OR BARCODE? ? OR BAR()CODE? ? OR SIGNAL??? OR PATTERN???? OR IMAG???? OR CODING) (3N) (GENERAT???? OR PRODUC????)
S2	261425	S GUI? ? OR GRAPHICAL()USER()INTERFAC???? OR COMMAND()LINE()INTERFAC???? OR MENU()DRIV???()INTERFAC???? OR UI? ? OR USER()INTERFACE??? OR ICON????()BASED()INTERFAC???? OR COMPUTER()GRAPHIC? ? OR VIRTUAL()INSTRUMENT????
S3	287767	S (HANDHELD OR HAND()HELD OR PORTABLE? ? OR COMPACT OR POCKET OR HANDPORTABLE OR HAND()PORTABLE? ? OR HANDCARRY OR HAND()CARRY OR MINIATURE??? OR PERIPHERAL) (3N) (DEVICE? ? OR APPARATUS? ? OR INSTRUMENT? ? OR APPLIANCE? ? OR MEANS OR MECHANISM? ?) OR PDT? ? OR PORTABLE()DATA()TERMINAL OR MOBILE()OPTICAL()READER OR PDA? ? OR PORTABLE()DATA()ASSISTANT OR PERSONAL()DIGITAL()ASSISTAN???? OR MOBILE()PHONE? ? OR MOBILEPHONE? ? OR CELLPHONE? ? OR CELLULAR()PHONE? ? OR PDO OR PORTABLE()DATA()ORGANIZER OR PERSONAL()DIGITAL()ORGANIZER OR GSM? ?
S4	452779	S REPROGRAM????? OR RECONFIG????? OR UPDAT????? OR CONFIG?????
S5	374450	(DATA OR INFORMATION OR INFO) (3N) (TRANSFER???? OR SHAR???? OR DISTRIBUT???? OR ALLOCAT???? OR DISSEMINAT????)
S6	374450	S (DATA OR INFORMATION OR INFO) (3N) (TRANSFER???? OR SHAR???? OR DISTRIBUT???? OR ALLOCAT???? OR DISSEMINAT????)
S7	626	S (SYNERGISTIC???? OR SYNERGETIC???? OR SYNCHRONOUS??? OR INSTEP???? OR INPHASE OR VERBATIM) (3N) (REPROGRAM????? OR RECONFIG????? OR UPDAT????? OR CONFIG?????)
S8	13759	S (PLURALITY OR NUMBER???? OR VARIOUS OR VARIETY OR NUMEROUS OR SEVERAL OR MULTIPLE OR DIFFERENT) (3N)SYMBOL????
S9	52665	S (PLURALITY OR NUMBER???? OR VARIOUS OR VARIETY OR NUMEROUS OR SEVERAL OR MULTIPLE OR DIFFERENT) (3N) (BYTE? ? OR BIT? ?)
S10	116885	S IC=(G01R-031/28 OR G02B-026/10 OR G06K-001/12 OR G06K-007/00 OR G06K-007/10 OR GOTK-009/22 OR G06K-019/06 OR H04L-009/00)
S11	116885	S IC=(G01R-031/28 OR G02B-026/10 OR G06K-001/12 OR G06K-007/00 OR G06K-007/10 OR G06K-009/22 OR G06K-019/06 OR H04L-009/00)
S12	231225	S MC=(T01-C06 OR T01-J17 OR T01-J20B1 OR T01-M06A1A OR T04-A03B1 OR T04-M02 OR W01-C01D3C OR W01-C01G6 OR W01-C01Q3 OR T01-C07C5 OR T01-H05A OR T01-J08F OR T01-S03 OR T04-A03B OR T05-L01C OR T01-C03C OR T01-N01D1 OR W01-C01Q2)
S13	20	S S1 AND S2 AND S3 AND S4
S14	9	S S13 AND PY<=2003
S15	55	S S1 AND S2 AND S4 AND S6
S16	0	S S15 AND S8
S17	2	S S15 AND S11
S18	7	S S15 AND S12
S19	1	S S1 AND S2 AND S8 AND S9
S20	24	S S1 AND S2 AND S8
S21	0	S S20 AND S11
S22	4	S S20 AND S12
S23	140	S S1 AND S8 AND S9
S24	1	S S23 AND S10
S25	3	S S23 AND S12
S26	0	S S1 AND S2 AND S7
S27	50	S S1 AND S7
S28	3	S S27 AND S3
S29	2	S S17 NOT S14
S30	6	S S18 NOT (S14 OR S17)
S31	1	S S19 NOT (S14 OR S17 OR S18)
S32	3	S S22 NOT (S14 OR S17 OR S18 OR S19)
S33	1	S S24 NOT (S14 OR S17 OR S18 OR S19 OR S22)
S34	2	S S25 NOT (S14 OR S17 OR S18 OR S19 OR S22 OR S24)

14/9/1 (Item 1 from file: 2) **Links**

INSPEC

(c) 2005 Institution of Electrical Engineers. All rights reserved.

08921702 **INSPEC Abstract Number:** B2004-05-7210B-013, C2004-05-7410H-028

Title: A data acquisition reconfigurable coprocessor for virtual instrumentation applications

Author Valdes, M.D.; Moure, M.J.; Quintans, C.; Mandado, E.

Author Affiliation: Instituto de Electronica Aplicada, Univ. de Vigo, Spain

Conference Title: Field-Programmable Logic and Applications. 13th International Conference, FPL 2003.

Proceedings (Lecture Notes in Comput. Sci. Vol.2778) p. 1107-10

Editor(s): Cheung, P.Y.K.; Constantinides, G.A.; de Sousa, J.T.

Publisher: Springer-Verlag, Berlin, Germany

Publication Date: 2003 **Country of Publication:** Germany xxvi+1179 pp.

ISBN: 3 540 40822 3 **Material Identity Number:** XX-2003-01587

Conference Title: International Conference on Field-Programmable Logic

Conference Date: 1-3 Sept. 2003 **Conference Location:** Lisbon, Portugal

Language: English **Document Type:** Conference Paper (PA)

Treatment: Applications (A); Practical (P)

Abstract: Virtual instruments intended for electronic circuits verification arose from the combination of computers supporting advanced graphical interfaces with data acquisition systems providing input/output capabilities. In order to increase the versatility and the operation rate of **virtual instruments**, we have designed several **data** acquisitions/**generation** modules based on **reconfigurable** hardware. By this way, not only the software modules but also the hardware functions are dynamically changed according to the requirements of each specific instrument. The main bases of the software and hardware levels of **reconfigurable virtual instruments** are described in this paper. This methodology summarizes our experience in the design of **virtual instrumentation** platforms oriented to different measurement applications. Finally, a new **data** acquisition/**generation** coprocessor based on FPGAs and optimized for the implementation of **portable instruments** is described.

Subfile: B C

Descriptors: coprocessors; data acquisition; **graphical user interfaces**; **reconfigurable** architectures; **virtual instrumentation**

Identifiers: data acquisition systems; **reconfigurable** coprocessor; **virtual instrumentation** applications; electronic circuits verification; graphical interfaces; data acquisition module; **data generation** module; **reconfigurable** hardware; software modules; hardware functions; **reconfigurable virtual instrument**; FPGA-based coprocessor

Class Codes: B7210B (Computerised instrumentation); B7210G (Data acquisition systems); B1265F (Microprocessors and microcomputers); C7410H (Computerised instrumentation); C5520 (Data acquisition equipment and techniques); C5130 (Microprocessor chips)

Copyright 2004, IEE

14/9/5 (Item 2 from file: 350) Links

Derwent WPIX

(c) 2005 Thomson Derwent. All rights reserved.

014269383 **Image available**

WPI Acc No: 2002-090081/**200212**

Related WPI Acc No: 2001-328213

XRPX Acc No: N02-066330

Software development system for personal computer, develops configuration state data for finished software product to be visually and logically represented

Patent Assignee: PHOENIX TECHNOLOGIES LTD (PHOE-N)

Inventor: BOMBET M A; COHEN F; LEWIS T A; LUSINSKY R D; SANDUSKY M S

Number of Countries: 095 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200193031	A1	20011206	WO 2001US9094	A	20010320	200212 B
AU 200149327	A	20011211	AU 200149327	A	20010320	200225
EP 1266284	A1	20021218	EP 2001922536	A	20010320	200301
			WO 2001US9094	A	20010320	
JP 2003535415	W	20031125	WO 2001US9094	A	20010320	200380
			JP 2002501178	A	20010320	

Priority Applications (No Type Date): US 2000531678 A 20000320

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200193031 A1 E 291 G06F-009/45

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200149327 A G06F-009/45 Based on patent WO 200193031

EP 1266284 A1 E G06F-009/45 Based on patent WO 200193031

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

JP 2003535415 W 299 G06F-009/44 Based on patent WO 200193031

Abstract (Basic): WO 200193031 A1

NOVELTY - A **configurator** (700) develops a configuration state **data** from a software **product** configuration **data** of the finished software **product**, directives and source **code** library. A **graphical user**

interface (GUI) (200) provides a visual and logical representation of the configuration **data** of finished **product** and receives the modification commands.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for finished product developing method.

USE - For customizing and combining source-code libraries to

develop software product such as ROM, basic input-output system (BIOS) code images for a personal computer, desk-top computer, portable computer, server, processor, buses and **peripheral devices**.

ADVANTAGE - The error within the current configuration is quickly identified before assembling an visual representation, thereby enabling quick adjustments and modifications.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the program development system.

Graphical user interface

(200)

Configurator (700)

pp; 291 DwgNo 1/42

Title Terms: SOFTWARE; DEVELOP; SYSTEM; PERSON; COMPUTER; DEVELOP;
CONFIGURATION; STATE; DATA; FINISH; SOFTWARE; PRODUCT; VISUAL; LOGIC;
REPRESENT

Derwent Class: T01

International Patent Class (Main): G06F-009/44; G06F-009/45

File Segment: EPI

Manual Codes (EPI/S-X): T01-J12B; T01-J20B

34/9/2 (Item 2 from file: 350) Links

Derwent WPIX

(c) 2005 Thomson Derwent. All rights reserved.

014699496 **Image available**

WPI Acc No: 2002-520200/200255

XRPX Acc No: N02-411722

**Reduced soft output information packet selection e.g. for
wireless data communications resulting in reduces information packet size**

Patent Assignee: COMSYS COMMUNICATION & SIGNAL PROCESSING (COMS-N);

COMSYS COMM & SIGNAL PROC LTD (COMS-N)

Inventor: RESHEF E

Number of Countries: 101 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200256567	A2	20020718	WO 2002IL2	A	20020102	200255 B
US 20020154704	A1	20021024	US 2001760401	A	20010112	200273
US 6529559	B2	20030304	US 2001760401	A	20010112	200320
EP 1350310	A2	20031008	EP 2002729496	A	20020102	200370
			WO 2002IL2	A	20020102	
AU 2002219477	A1	20020724	AU 2002219477	A	20020102	200427
CN 1526196	A	20040901	CN 2002803422	A	20020102	200478

Priority Applications (No Type Date): US 2001760401 A 20010112

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200256567 A2 E 49 H04M-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU
ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020154704 A1 H04L-005/12

US 6529559 B2 H04L-025/02

EP 1350310 A2 E H03D-001/00 Based on patent WO 200256567

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI TR

AU 2002219477 A1 H04M-000/00 Based on patent WO 200256567

CN 1526196 A H03D-001/00

Abstract (Basic): WO 200256567 A2

NOVELTY - A reduced soft output information packet

generated by the soft **symbol**

generator is used by a soft-symbol-to-soft-bit mapper to

convert soft symbol decision information into soft bit decision
information. A symbol competitor table is constructed that includes the
most likely symbol competitors for each bit of the symbol.

DETAILED DESCRIPTION - The table is populated with m entries for
each possible symbol value, where m represents the **number**

of **bits** per **symbol**. Symbol competitors are retrieved from the table according to the hard decision. An INDEPENDENT CLAIM is included for an apparatus.

USE - To reduce the soft output information packet to be computed by a soft **symbol generator** e.g. for wireless data communications.

ADVANTAGE - Soft **symbol** information is **generated** only for the **symbol** competitors rather than for all possible symbols thus reducing the size of the information packet.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic diagram of the apparatus used to implement the method.

pp; 49 DwgNo 3/12

Title Terms: REDUCE; SOFT; OUTPUT; INFORMATION; PACKET; SELECT; WIRELESS; DATA; COMMUNICATE; RESULT; REDUCE; INFORMATION; PACKET; SIZE

Derwent Class: W01; W02

International Patent Class (Main): H03D-001/00; H04L-005/12; H04L-025/02; H04M-000/00

International Patent Class (Additional): H03D-003/22; H03M-013/23; H04B-001/38; H04L-023/02; H04L-027/20; H04L-027/22

File Segment: EPI

Manual Codes (EPI/S-X): W01-A01B2; W01-A03B; W01-A08B2;

W01-C01D3C; W01-C01G6C; W02-C03C1C; W02-G03X